



Gulf of Mexico Harmful Algal Bloom Bulletin

20 July 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: July 17, 2006

Conditions Report

A harmful algal bloom has been identified in Lee and northern Collier counties. Patchy low impacts are possible for northern Lee County today and tomorrow, with patchy moderate impacts possible Saturday and Sunday. Patchy moderate to high impacts are possible in the San Carlos Bay and Pine Island Sound regions of Lee County today through Monday. In southern Lee County and northern Collier County, patchy very low impacts are possible today and Friday, with patchy low to moderate impacts expected on Saturday through Monday. Reports of discolored water are possible.

Analysis

The harmful algal bloom persists from northern Lee County to northern Collier County and has continued to intensify in the Pine Island Sound region. *K. brevis* samples indicate an increase at Boca Grande Pass from very low (7/13; FWRI) to medium (7/17; FWRI). A high (7/18; FWRI) concentration was also found in the northern region of Pine Island Sound southeast of Boca Grande Pass. In southern Lee County, levels remain low. In northern Collier County, levels remain medium while in the central region of Collier County samples indicate that *K. brevis* is not present (7/18; FWRI). The imagery from July 17 confirms the continued presence of elevated chlorophyll levels south and south-east of Sanibel Island.

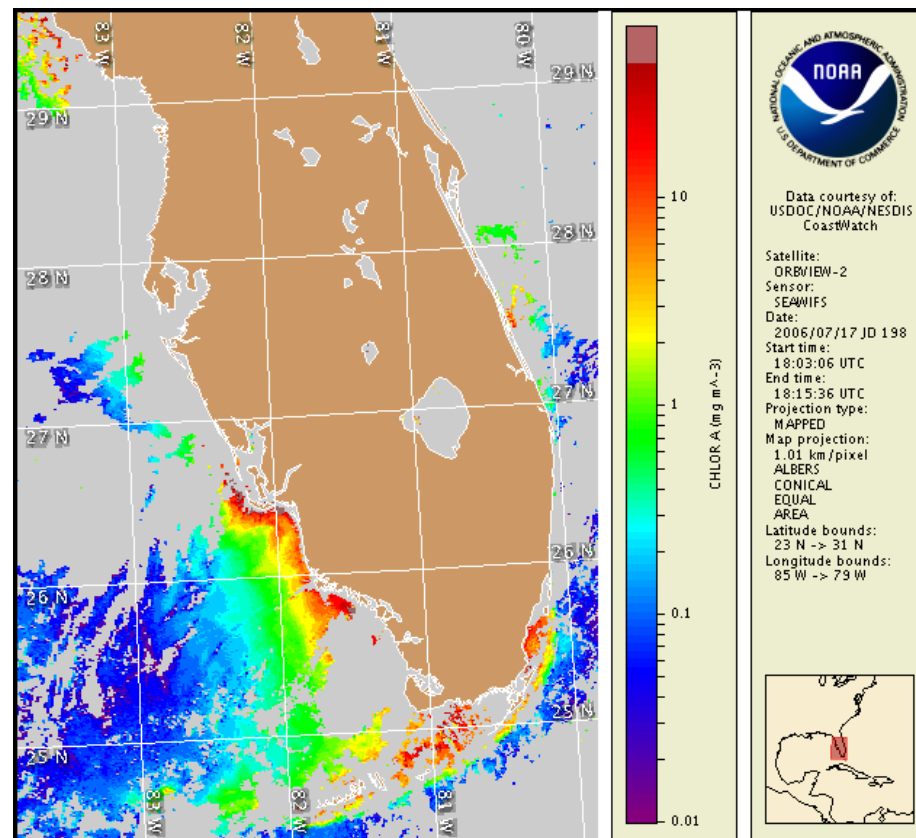
A region of high chlorophyll ($>20 \mu\text{g/L}$) was detected via satellite imagery on July 17, southeast of Marco Island, centered at $25^{\circ}48'0.89''\text{N}$, $81^{\circ}33'28.55''\text{W}$. Samples on and near shore indicate presence of non-harmful algae. Reports of discolored water are possible. Further sampling is recommended.

Southerly winds throughout the weekend may cause slight northerly transport of the bloom. Southwesterly winds on Saturday through Sunday may increase coastal impacts.

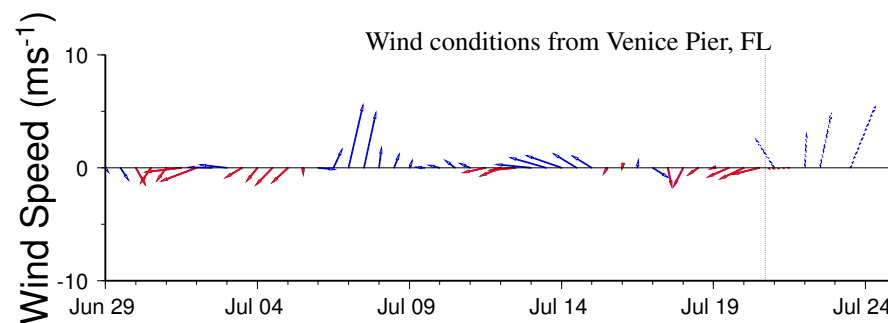
Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

Urizar, Keller, Allen

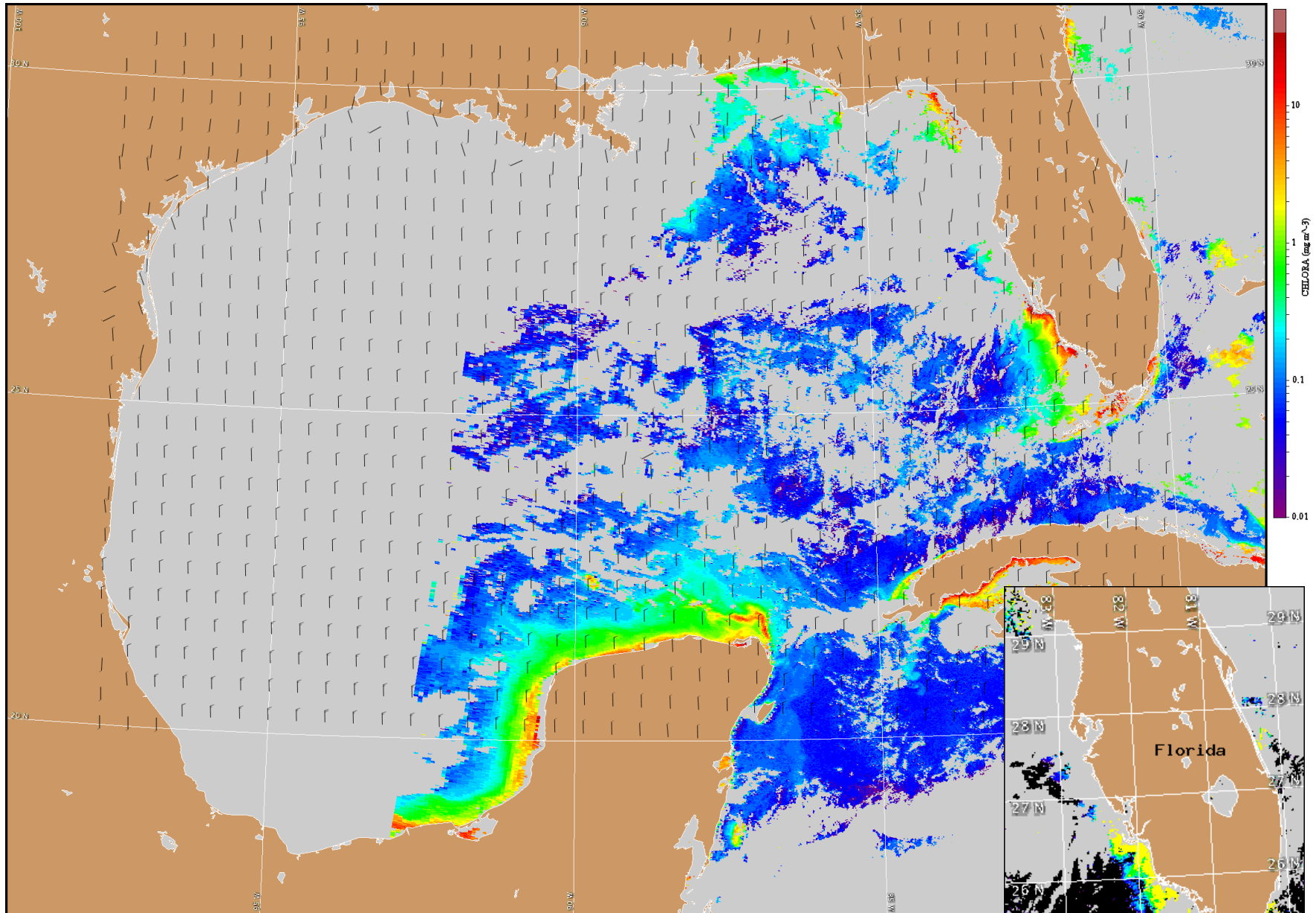


Satellite chlorophyll image with possible HAB areas shown by red polygon(s).

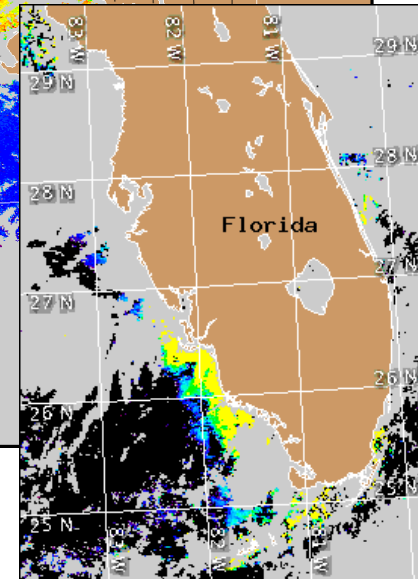


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Southeasterly winds today and tomorrow at 5-10 knots (3-5 m/s) becoming onshore in the afternoons. Southerlies Friday night, followed by southwesterlies (10 knots, 5 m/s) on Saturday through Sunday. Southerlies (5-10 knots, 3-5 m/s) on Monday.



Satellite chlorophyll image and forecast winds for July 21, 2006 12Z.



Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).